

Remarks/Arguments

Claim Summary

By this Amendment, dependent claims 8 and 12 have been revised.
Claims 1-3, 6, 8-14 and 17 remain pending in the application.

Allowed Claims

Applicants acknowledge with thanks the indicated allowance of claims 4 and 5.

Claim Objection

By this Amendment, claim 8 has been revised as suggested by the Examiner to correct the dependency thereof.

35 U.S.C. §112, first and second paragraphs

By this Amendment, claim 12 has been revised in consideration of the Examiner's comments.

In particular, referring to the example of FIG. 7 of the application, claim 12 now recites that an initial pulse of the second control pulse signal (SRP) is delayed relative to a second pulse of the clock signal (PCLK) by a second delay. This second delay is shown by the second arrow (from the left) in FIG. 7. As recited in claim 13, the second delay is less than the first delay corresponding the first arrow (from the left) in FIG. 7.

Reconsideration of the rejections under 35 U.S.C. §112, first and second paragraphs, is requested.

35 U.S.C. §103

Claims 1-3, 6, 8-10, 12 14 and 17 were rejected under 35 U.S.C. §103 as being unpatentable over Toda (US 6363465) in view of Nam (US 6633995). Applicants respectfully traverse this rejection and request reconsideration thereof.

In the Office Action, the Examiner states:

“Toda-465 does not disclose a pulse width of at least the initial pulse of the second pipeline control signal is less than a pulse width of each of the pulses of the first pipeline control pulse signal.

Nam discloses a pulse width of at least the initial pulse of the second pipeline control signal is different than a pulse width of each of the pulses of the first pipeline control pulse signal (col. 7, lines 33-37; Fig. 13)”

Referring to FIGS. 12 and 13 of Nam, this reference teaches that “the pulse widths w1 and w2 depend on the delays of the respective sets of three inverters connected in cascade.” (Col. 7, lines 35-37.) In particular, the pulse width w1 is determined by the three inverters in the pulse generating circuit 172, and the pulse width w2 is determined by the three inverters in the pulse generating circuit 174, separately.

Nam does not attribute any special relationship between the pulse widths w1 and w2, and indeed, does not state that the pulse widths w1 and w2 should preferably be different from one another. Rather, Nam simply states that the pulse widths w1 and w2 are dependent upon the delays of the three (3) invertors (INV) illustrated in FIG. 12. An objective in Nam is to compensate for environmentally induced variations in the cascade-generated clock signals by configuring the generating circuits (172, 174) such that the pulse widths w1 and w2 are independently set within each circuit. Thus, Nam makes the observation that the pulse widths w1 and w2 depend on the delays of the respective sets of three inverters connected in cascade.

Therefore, even if the teachings of Nam were somehow incorporated into the configuration of Toda-465, the result would not include the presently claimed conditions in which (a) an initial pulse of the second pipeline control pulse signal is delayed relative to an initial pulse of the first pipeline control pulse signal, and (b) a pulse width of at least the initial pulse of the second pipeline control pulse signal is less than a pulse width of each of the pulses of the first pipeline control pulse signal. In other words, the teachings of Nam and Toda-465, individually and in combination,

do not teach that a second (time-wise) pipeline control signal is to have an initial pulse which is less than a first (time-wise) pipeline control signal.

For at least the reasons stated above, Applicants respectfully contend that claims 1-3, 6, 8-10, 12 14 and 17 would not have been obvious to one of ordinary skill in the art in view of the combined teachings of Toda-465 and Nam.

Conclusion

No other issues remaining, reconsideration and favorable action upon the claims now pending in the application are requested.

Respectfully submitted,
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